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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,966	02/02/2004	Shen-Hong Chou	250122-1180	9132
24504	7590	08/25/2005		
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948			EXAMINER TSIDULKO, MARK	
			ART UNIT 2875	PAPER NUMBER

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/769,966

Applicant(s)

CHOU, SHEN-HONG

Examiner

Mark Tsidulko

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>020204</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

Claims 3, 13 are objected to because of the following informalities: it is unclear how the three LEDs can be in a ratio 1:1:2?

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4-6, 9, 11, 12, 14-16, 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin et al. (US 6,856,087).

Referring to Claim 1 Lin et al. disclose (Fig.5H) a display device having a plurality of cells [51] wherein each cell has three colors LEDs arranged in equilateral triangle.

Referring to Claims 2, 12 Lin et al. disclose (Fig.5H) that the LEDs are red, blue and green.

Referring to Claims 4, 14 Lin et al. disclose that the three of the cells [51] are arranged in a second equilateral triangle (see attached figure, made by Examiner, using Fig.5H of Lin et al.).

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Referring to Claims 5, 6, 15, 16 Lin et al. disclose a fourth LED having green color disposed in the center of the second triangle (see attached figure, made by Examiner, using Fig.5H of Lin et al.).

Referring to Claims 9, 19 Lin et al. disclose (Fig.5B) a planar surface, on which the light source is provided.

Referring to Claim 11 Lin et al. disclose (Fig.5H) a display device having a plurality of cells [51] wherein each cell has three colors LEDs arranged in equilateral triangle.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 13, as best understood, 7, 8, 17, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US 6,856,087) in view of Billerbeck (US 2004/0196374).

Referring to Claims 3, 13 Lin et al. disclose the instant claimed invention except for red, blue and green ratio of 1:1:2.

Billerbeck discloses an image processing device wherein the quantities of the red, the blue and the green LEDs are in a ratio of 1:1:2 (page 2, [0025]).

Referring to Claims 7, 8, 17, 18 Lin et al. disclose the instant claimed invention except for varying the intensity of the cell by varying power to one of the LEDs.

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The intensity of the cell, composed of three LEDs, will be inherently varied if the intensity of any member of the cell will be changed by power varying. It is understood, that the value of the power to any of the LEDs can be provided depending on necessity what intensity of the cell should be obtained.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the quantities of the red, the blue and the green LEDs are in a ratio of 1:1:2, as taught by Billerbeck, in the device of Lin et al. in order to obtain good resolution and color balance.

Claims 10, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US 6,856,087) in view of Frank et al. (US 4,125,319).

Lin et al. discloses the instant claimed invention except for light control and dispersion device.

Frank et al. disclose a light control device disposed above the light source (Fig.4) and including a dispersion layer (Abstract, col.11, line 60)

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the light control device of Frank et al. for the device of Lin et al. in order to control the light rays incident on an operative area.

### ***Conclusion***

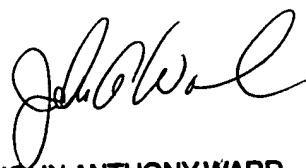
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Tsidulko whose telephone number is (571)272-2384. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M.T.  
August 4, 2005



JOHN ANTHONY WARD  
PRIMARY EXAMINER